VIA Express Mail EV786328877US

Docket Number
40404.30/tt

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Hiroshi OJI

Serial No.: Currently unknown

Filing or 371(c) Date: Concurrently herewith

Title: SEMICONDUCTOR DEVICE HAVING HIGH-K GATE DIELECTRIC LAYER AND METHOD FOR MANUFACTURING THE

SAME

International Application No.: PCT/JP2005/11260

International Filing Date:

June 20, 2005

#### INFORMATION DISCLOSURE STATEMENT

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 CFR §1.56, and in recognition of his duty to disclose to the United States Patent and Trademark Office relevant information known to be material to patentability, Applicant herewith submits the attached Form PTO-1449. Reference Nos. 1, 2, and 4-9 were cited in the attached International Search Report for PCT Application No. PCT/JP2005/11260.

The relevance of Reference No. 3 is discussed on page 1 of the substitute specification filed concurrently herewith.

Information Disclosure Statement March 21, 2006 Page 2 of 2 10/572730

## MAP20 Rec'd PCT/PTO 21 MAR 2006

The statement is not a representation that all of the information cited is necessarily effective as prior art against the application.

Applicant respectfully requests that the cited references be made of record in the subject application.

Respectfully submitted,

Date: March 21, 2006

/Joseph R. Keating #37,368/ Attorney for Applicant(s)

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PTO/SB/08A (04-03)

Substitute for form 1449/PTO				Complete if Known			
Substitute	e for form 14	149/PIU		Application Number	111/5/2/24		
INFO	DMAT	ION D	ISCI OSLIDE	Filing Date			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				First Named Inventor	Hiroshi OJI		
				Art Unit			
(Use as m	nany sheets a	as necessa	ry)	Examiner Name			
Sheet	1	of	2	Attorney Docket Number	40404.30/tt	フ	

	U.S. PATENT DOCUMENTS						
Examiner Initiais*	Cite	Document Number	Publication Date MM -YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	No.1	Number-Kind Code <sup>2(if known)</sup>					
	1	5,362,981	11-1994	SATO et al.			
	2	5,589,410	12-1996	SATO et al.			
<u> </u>				-			

	*			DOCUMENTS		-
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where	Te
Initiais*	No.1		Date MM -YYYY	Applicant of Cited  Document	Relevant Passages or Relevant Figures Appear	
	<u> </u>	Country Code <sup>3</sup> -Number-Kind Code <sup>5</sup> (if known)	<del></del>	*	rigules Appeal	
	3	JP 2002-313950 (with English	10-2002	JAPAN		X
		Abstract and machine translation)				
	4	JP 9-191108 (with English	07-1997	JAPAN		X
		Abstract and machine translation)				
•	5	JP 2-28971 (with English Abstract)	01-1990	JAPAN	·	X
· <u>·</u>	6	JP 3-276730 (with English	12-1991	JAPAN		X
		Abstract)				
	7	JP 2000-353756 (with English	12-2000	JAPAN		X
		Abstract and machine translation)				
	8	JP 5-183159 (with English	07-1993	JAPAN		X
		Abstract and machine translation)		(4)	190	
	<del>                                     </del>					

Examiner	Date
Signature	Considered

<sup>\*</sup>Examiner: initial if reference considered, whether of not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

¹ Applicant unique citation designation number (optional). ²See Kind Codes of USPTO Patent documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. ³ Enter Office that issued the document by the two-letter code (WIPO Strandard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Abstract is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14.



Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

	<u> </u>		
Sheet	2	of	2

Complete if Known				
Application Number	10/572730			
Filing Date				
First Named Inventor	Hiroshi OJI			
Art Unit				
Examiner Name				
<b>Attorney Docket Number</b>	40404.30/tt			

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title  Of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
	9	ZHU et al.; "HfO <sub>2</sub> and HfAIO for CMOS: Thermal Stability and Current Transport"; IEDM 2001; pp. 463-466.		
	10	International Search Report for PCT Application No. PCT/2005/11260, mailed September 27, 2005.		
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Examiner	Date	
Signature	Considered	<u>_</u>

<sup>\*</sup>Examiner: Initial if reference considered, whether of not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

Applicant unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14.